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BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Implement the Commission's Procurement Incentive Framework and to Examine the Integration of Greenhouse Gas Emissions Standards into Procurement Policies.	R. 06-04-009

COMMENTS OF THE WESTERN POWER TRADING FORUM AND THE ALLIANCE FOR RETAIL ENERGY MARKETS ON THE JOINT STAFF PROPOSAL FOR REPORTING OF GREENHOUSE GAS EMISSIONS BY LOAD-SERVING ENTITIES

Introduction

In accordance with the direction provided in the July 19, 2007 Administrative Law Judge's Ruling[1] under Rulemaking 06-04-009, the Western Power Trading Forum ("WPTF") and the Alliance for Retail Energy Markets[2] ("AReM") respectfully submit the following comments on the questions raised regarding the Market Advisory Committee's 'first-seller' approach.

WPTF/AReM has not taken a position on whether a load-based greenhouse gas ("GHG") cap for the electric power sector or the alternative 'first-seller' approach recommended by the Market Advisory Committee is preferable, and our comments should not be taken as an endorsement of either. Further, WPTF/AReM comments regarding a load-based approach are specifically with regard to the model proposed by the CPUC/CEC in the recent staff reporting proposal. These comments are not intended to refer to alternative models for a load-based approach.

WPTF/AReM considers that neither a first-seller nor the CPUC's proposed load-based approach can reasonably be expected to alter dispatch of or investment in out-of-state low-emission generation. This is due solely to the fact that electricity consumed in

[1] Administrative Law Judges' Ruling Requesting Comments and Legal Briefs on Market Advisory Committee Report and Notice of En Banc Hearing ("Ruling").

[2] AReM is a California mutual benefit corporation whose members are electric service providers that are active in California's direct access market. The positions taken in this filing represent the views of AReM but not necessarily those of particular members or any affiliates of its members with respect to the issues addressed herein.

California represents only a portion of the overall WECC market. Rather than seeking to achieve this impossible goal, WPTF/AReM believes that CPUC should set a more achievable objective of minimizing emission leakage by reducing the price differential that would occur between in-state and imported power under a purely source-based system. This objective could be met simply by ensuring that all imported power is subject to emission constraints by assigning a default emission rate for imported unspecified power.

WPTF/AReM's responses to the specific questions raised by the Ruling are presented below.

A. Basic Definitions

1. Is the above description of this deliverer/first-seller approach accurate? Comment on whether you agree with this description, and if not, explain how the first-seller approach should be described differently and why.

WPTF/AReM generally agrees with this definition, but believes that it must be further clarified. Specifically, for imported power, the first seller should be defined as the entity that actually arranges for transmission of power from out-of-state to a point of delivery within California. On a NERC e-tag this will be identified as the PSE (Purchasing Selling Entity) listed on the penultimate line under Physical Path. For in-state generation, the first seller would always be the plant operator.

2. For imports, who has ownership of electricity when it enters California? Is the "Purchasing/Selling Entity" (on the North American Electric Reliability Corporation (NERC) E-tag) listed at the first Point of Delivery in California the deliverer/first seller? If this is generally the case, are there any exceptions?

Yes. The PSE listed at the first POD in California should be defined as the first seller.

3. Are there any inter-Balancing Authority imports not accounted for by E-tags? If so, describe these instances and explain how these imports can be accounted for.

E-tags are used for power imports scheduled up to an hour ahead of real-time. There may be some inadvertent power flows between balancing authorities in real-time,

but this is likely to be a very small proportion of overall power, and can not be attributed to any particular seller/deliver. For this reason, WPTF/AReM recommends that emissions from this inadvertent power be considered in setting the overall emissions cap for the power sector, but that the emissions are not assigned to any particular importer.

4. What agency could/would identify importing contractual parties? Is there already a state or federal official compilation of these market participants?

WPTF/AReM expects that the CPUC has regulatory authority to require retail electricity providers to compile and report e-tag information for imported power for which the LSE was the first seller. However, it is not clear that the same authority could be extended to power marketers or out-of-state independent power producers.

WPTF/AReM believes that the California Independent System Operator and other California balancing authorities must have a role in providing aggregate schedule information against which to verify the data reported in order to prevent underreporting of imports. It may also be necessary for the ISO and balancing authorities to be the primary source of information to identify the responsible first seller when this is a marketer or out-of-state power producer.

5. Could the deliverer/first-seller be identified by means other than the NERC E-tag? If so, please explain.

Power imported under contract to a retail electricity provider ("REP") or from the REP's own resources can be identified by the REP's reporting of procurement contracts and assets. However, for power sold through the Integrated Forward Market or the real-time market, NERC tags are the only viable means of identification.

6. How would a deliverer/first-seller system deal with power marketers and brokers?

Any marketer that imports power into California would be responsible, as the first seller, for the emissions associated with that power. Because power brokers do not actually own power and are not responsible for scheduling, they should not be regulated under the first-seller approach.

7. How would treatment of imports differ in a deliverer/first-seller system compared to a load-based approach?

The treatment of imports is a thorny issue under both a first-seller and a load-based system, and requires resolution of two issues: who bears responsibility for the imported power and what emission rate is assigned for the imported power. While a load-based and a first-seller approach differ in where the responsibility for imported power lies (although it would be the same where a REP is the first-seller), both approaches face similar challenges with respect to the attribution of emissions for imported power. The more accurate the method used for assigning emissions (e.g. plant-specific emission rates, or control-area specific emission rates), the more the approach allows for contract shuffling and other advantages or disadvantages. Conversely, an approach that uses default emission rates for unspecified imports for imported power may reduce incentives for shuffling and gaming but it would also reduce the accuracy of the associated emission estimates. The effectiveness of tracking unit-specific emissions, as well as default emission rates could be improved by coordination with other states within the WECC region, particularly those in the Western Regional Climate Initiative.

8. To sum up your answers to the previous questions, provide a succinct but complete definition that identifies, for each way in which electricity could be delivered to the California grid, the entities that would be responsible for compliance with AB 32 regulations under a deliverer/first-seller approach.

In-state generators: Responsible for all emissions, regardless of whether power is delivered into California or exported.

REP importation of power from out-of-state asset: REP responsible for emissions

Marketer sale into CAISO IFM or real-time market: Marketer responsible for emissions

REP contract with independent power producer: Entity with ownership of power at first point of delivery in California

B. General Policy Issues

9. Compare and contrast the environmental integrity of a deliverer/first-seller and a load-based approach. How would a deliverer/first-seller approach address leakage? How would a deliverer/first-seller approach address contract shuffling?

A first-seller approach and the model for a load-based approach proposed by the CPUC/CEC in the staff proposal are comparable in their ability to address leakage. The advantage of both approaches relative to a standard source-based system is that they would reduce the price differential between in-state and out-of-state power that would arise from imposition of a carbon price on in-state resources only. Reduction of this differential reduces the possibility of increasing out-of-state sourced generation in order to avoid the carbon compliance cost.

However, WPTF/AReM believes that the first-seller approach is superior to the CPUC's proposed load-based approach in addressing contract-shuffling. Under a first-seller approach, the ability to contract shuffle is restricted to imported power, rather than the entirety of California load, as would be the case under the PUC proposal.

10. Would the scale of possible emissions leakage or contract shuffling differ under the deliverer/first-seller approach compared to a load-based approach?

See response to questions 9.

11. Is there any advantage to applying the deliverer/first-seller approach to reporting only, while having the retail providers be the point of regulation (as with load-based)? Why or why not?

WPTF/AReM sees no advantage to this type of approach, since it would not improve the accuracy of emission estimates of a load-based approach.

12. Compare and contrast the deliverer/first-seller and load-based approaches in terms of their impacts on electricity prices, costs, and reliability for consumers.

The first-seller approach would allow suppliers to bid energy into the spot market including both operating costs and the cost of emissions. This would result in a more efficient energy market with lower associated emissions. In this way, the first-seller approach would also impact the emissions outcome of both the spot markets and longer term bilateral transactions. The load-based approach would largely impact emissions outcomes through bilateral transactions and schedules. Load's potential over-reliance on bilateral transactions to control emissions outcomes could also impact liquidity and efficiency of the Integrated Forward Market.

The first-seller approach would tend to raise spot prices, but the impact on retail prices is more a function of the allocation of credits or credit revenues

13. Would a deliverer/first-seller approach and a load-based approach have different impacts on wholesale power prices? Which would result in higher prices? Why? Is this good or bad?

WPTF/AReM reserves the right to address this question through reply comments.

14. What impact would a deliverer/first-seller approach have on long-term investment in low-GHG emitting generation technologies? Is this better or worse than under a load-based cap? Why?

For in-state generators, the first-seller approach injects the price of carbon at the generator level, allowing these generators to factor the allowance price into their bids. This allowance price increases the variable operating cost of dirty resources (i.e. high-emission generators) relative to cleaner ones. This increased cost will reduce the profitability of these generators relative to cleaner ones over the long term, and incentivize investment in cleaner resources.

Although the CPUC proposed load-based approach would encourage contracting of cleaner resources, and thus investment, the approach is less effective in capturing the carbon price at the generator level. Thus, it does not alter the cost or profitability of operating dirty resources.

Neither the first-seller approach, nor the CPUC's load-based approach is likely to have a significant impact on investment in out-of-state resources.

15. How would a deliverer/first-seller approach interact with an upstream program design as articulated in Chapter 4 of the Market Advisory Committee report? Explain your answer in detail.

Neither a first-seller nor a load-based approach would be compatible with an upstream emissions trading system. Under an upstream system, emissions from all fossil fuels combustion in-state, including that used for electricity generation, will be captured at the point of fuel distribution. Additional regulation of emissions at the generator (or REP) level would result in the carbon being priced twice. Thus, if California adopted an upstream system, it would be appropriate to regulate emissions from imported electricity

only - not in-state generators or REPs. WPTF/AReM expresses no opinion on the legality of such an approach.

16. What impact would a deliverer/first-seller approach have on electricity service providers?

WPTF/AReM reserves the right to address this question through reply comments.

C. Interaction with Energy Markets

17. Compare and contrast the impact that a deliverer/first-seller and a load-based system would have on the existing wholesale energy markets, both at the California Independent System Operator (CAISO) and outside of it.

Regulation of emissions at the generator level for in-state resources under a first-seller approach allows generators to factor allowance prices into operating costs and bids. Because the carbon price is reflected in bid prices, the approach is compatible with market dispatch and contracting practices and will not discourage unspecified power purchases.

For out-of-state resources under a first-seller approach, the effect on market interactions would depend on the methodology used to assign emissions. If a common default emission rate is applied to unspecified imported power, then marketers (and generators if contracting or bidding directly) would factor the allowance price into bids into California. Such a result is compatible and consistent with the wholesale electricity markets.

18. For those entities participating in the CAISO markets, what would be the likely differential impacts of a deliverer/first-seller versus a load-based system on the CAISO's implementation of the Market Redesign and Technology Update (MRTU) system, including day-ahead and real-time markets for energy, transmission, and reserves?

As WPTF noted in its comments on the Staff reporting proposal, the CPUC's proposal to assign a lower default emission rates for power purchased through the real-time market than that purchases through the day-ahead market will create an incentive for scheduling resources through the former. Such an incentive runs directly counter to the

State's efforts to move power schedules out of the real-time market and into the forward market.

The first-seller approach eliminates the need to assign default emission rates through power purchased through the CAISO markets. For this reason, the first-seller approach is more directly compatible with the market efficiency objectives contemplated in implementation of the MRTU.

The load-based approach would involve loads managing their emissions either through 1) bilateral transactions and schedules outside of the CAISO's markets, or 2) by LSEs providing a current consensus estimate of emission prices to the CAISO for its use in operating the integrated forward markets ("IFM"). The first option will tend to reduce the economic efficiency of the IFM, and the second option would involve a mechanism that is not currently contemplated in the MRTU design.

19. To what extent would either approach (deliverer/first seller or load-based) be likely to alter the dispatch of existing generation units in the near-term? Why? If there is a difference between the approaches, how significant would it be?

As stated in the response to question 17, the first-seller approach internalizes the cost of carbon at the generator level for in-state generators, unlike the CPUC's model for a load-based approach. For this reason, the first-seller approach has greater potential to alter dispatch of existing units in the short-term than the load-based model. Of course, the extent to which the first-seller approach will affect dispatch of in-state generators will depend on the relative prices of allowances and fuels.

Neither approach has much potential to affect dispatch of out-of-state generators, as the use of default emission rates or contracts to assign emissions does not inject the carbon price into the generators' operating costs.

D. Interaction with Existing Programs and Policies

20. How would a deliverer/first-seller approach interact with the Public Utilities Commission's Resource Adequacy requirements and procurement/portfolio oversight? How would this approach affect efforts to maintain resource adequacy by the publicly-owned utilities (POUs)?

WPTF/AReM reserves the right to address this question through reply comments.

21. How would a deliverer/first-seller approach interact with the Public Utilities Commission's promotion of end-use efficiency? How would this approach affect energy efficiency programs for the POUs? Under which system (deliverer/first-seller or load-based) would the penetration of end-use efficiency likely be greater? Why?

REPs are better placed to encourage end-use efficiency than generators, but the extent to which they do so is likely to be influenced more by current incentives and cost-recovery mechanisms, than by a load-based GHG paradigm. Market prices will induce some degree of investment in energy efficiency, to the extent that it really is the cheapest way to reduce emissions, and in this regard, the first-seller approach provides a better price signal than the load-based model. None-the-less, the CPUC's end-use efficiency program is compatible with either approach.

22. How would a deliverer/first-seller approach interact with the State's Renewable Portfolio Standard requirements (both existing and proposed)?

With imposition of an emission trading system, implementation of a Renewable Portfolio Standard ("RPS") becomes somewhat redundant, as both contribute to reductions in GHG emissions. Under a load-based approach, a REP's efforts to meet the RPS (either through contracting or through purchase of Renewable Energy Credits) should also reduce its attributed emissions under a load-based cap.

A first-seller system creates additional incentives for investment and procurement of renewable energy and other low-emission resources, by increasing the price of high-emission generation. However, the RPS and the trading system would not necessarily overlap, since it is not clear whether renewable generators would be regulated under a GHG cap. Regardless of whether renewable generators are subject to the GHG cap, Renewable Energy Credits (RECs) from in-state generators should not be allowed to offset actual emissions for GHG compliance under a first-seller approach.

For imported power, if the REC is bundled with the power and surrendered by the REP receiving the power, than the emission rate of that REC should be applied to the corresponding power. However, if California allows for unbundled RECs, than any imported power from which the REC has been broken off should be assigned the

appropriate default emission rate – not the emission rate of the renewable generator. Unbundled RECs should not be allowed to offset GHG emissions.

23. How should renewable energy generators be treated under a deliverer/first-seller system?

For zero-emission renewable energy, there is no need to regulate these generators under a first seller system. GHG emitting renewable energy (not otherwise deemed to be non-emitting) could be governed under the same system as fossil-based energy under a source – based system.

24. Compare and contrast the impact of a deliverer/first-seller and a load-based approach on the voluntary renewables market.

WPTF/AReM reserves the right to address this question through reply comments.

25. Would one approach (deliverer/first-seller or load-based) have an advantage over the other in producing the greatest amount of emissions reductions through modifications (e.g., retrofitting, efficiency improvements, etc.) to existing power plants? Why?

Yes, the first-seller approach would be more efficient in reducing emissions, because it more directly internalizes the cost of carbon at the generator level for in-state resources, as discussed previously. While the CPUC model may create some incentive for modifications of owned assets or resources under long-term unit-specific contracts, this incentive would be lower because the total emissions attributed to the REP may be limited by contract terms, not actual dispatch of the generator.

E. Reporting, Tracking, and Verification

26. What would be the data and administrative requirements of the deliverer/first-seller approach?

For in-state generators, the data requirements are essentially the same as a traditional source-based trading system: generator-specific emissions information. The reporting requirements for generators are already being addressed through the Air Resources Board's proceeding on mandatory reporting for the power sector.

Additional data would be required to track imported power, identify the responsible first-seller and assign emissions. As discussed in section A, collection and compilation of NERC e-tags for all power scheduled for delivery into the state will enable quantifications of power imports, and determination of the responsible entity. If the NERC e-tag data is collected directly from the responsible entities, this data should be verified against that collected by the CAISO and other balancing authorities in the state.

27. How would the deliverer/first-seller approach relate to the Public Utilities Commission/Energy Commission Staff reporting protocol proposal, i.e., would the deliverer/first-seller approach require modifications to the Staff reporting proposal, or could it serve as an interim reporting protocol? If modifications are required, what exactly would they be?

The data requirements for a first-seller approach, discussed in question 26, are fundamentally different than for a load-based approach. If California adopts a first-seller approach for the electricity sector, additional reporting of emission information from retail electricity providers should not be required.

28. If a deliverer/first-seller approach is adopted, what would be the pros and cons of requiring reporting both from deliverers/first sellers and retail providers, in order to provide ARB with multiple control data sets for comparison?

As WPTF noted in its comments on the staff reporting proposal, the requirement for REPs to report detailed information on specified power purchases is unnecessarily burdensome for merchant generators and electricity service providers. Given that this information will be reported directly by in-state generators under a first seller approach, WPTF/AReM believes that it would not be desirable to require the same information to be reported by REPs.

29. Compare and contrast the ability of a deliverer/first seller and a load-based system to create confidence for investors and confidence for environmental advocates about tracking and compliance.

As stated in our response to questions 26, both the first-seller and load-based approach suffer the same flaws with respect to their ability to accurately track emissions from imported power. However, the first-seller approach is superior to the load-based

approach in its ability to accurately track emissions from in-state power generation, and thus lead to actual emission reductions.

30. Who/what governs access to the purchasing/selling entity data on the NERC E-tags? What would a state agency need to do to obtain access to E-tag data?

WPTF/AReM reserves the right to address this question through reply comments.

31. What role would the CAISO play, if any, in the implementation and administration of a deliverer/first seller program? What role would other control area operators or balancing authorities play?

WPTF/AReM believes that the California Independent System Operator and other California balancing authorities should have a role in providing aggregate schedule information against which to verify the data reported by importers. It may also be necessary for the ISO and balancing authorities to be the primary source of information to identify the responsible first seller when this is a marketer or out-of-state power producer

F. GHG Emissions Allowance Allocation Issues

32. Would implementation of a deliverer/first-seller approach necessitate auctioning of GHG emissions allowances? Why or why not?

WPTF/AReM believes that implementation of a first seller approach may necessitate some auctioning of emission allowances. While there are several options for free allocations of allowances for in-state generation, we can not conceive of a method for freely allocating allowances for imported power, particularly power sold through marketers and directly through the integrated forward and real-time markets. For this reason, WPTF/AReM anticipates that auction of allowances for imported power may be necessary.

33. If you do not believe that an auction would be required under the deliverer/first-seller approach, explain how an emissions allocation system would work under a deliverer/first-seller approach. In doing so, answer the following:

a. To whom would allocations be given?

b. If you recommend allowances be given to deliverers/first sellers, on what basis would allocations be given during any particular compliance period?

c. How would the state of California know how many allowances were needed by importers?
d. How would marketers be treated?
e. How would electricity service providers be treated?
f. Would zero-carbon generators also receive allowances?
g. What would be the likelihood of windfall profits under such a system?
h. How could such a system prevent windfall profits?

WPTF/AReM reserves the right to address this question through reply comments.

34. If you recommend allocation of allowances to retail providers, followed by an auction to deliverers/first sellers, how would such an auction be administered? What kinds of issues would such a system raise?

WPTF/AReM has not taken a position on whether free allocation or auction would be the preferred method of distribution under the first seller approach. If free allocation is used, allowances should go to the entities that face net, unrecoverable costs from buying allowances.

G. Relationship to Other Sectors under AB 32 in California

35. Would GHG emissions allowances created under a deliverer/first-seller compliance regime in the electricity sector be compatible for trading with other sectors in the California economy, assuming a multisector cap–and-trade system? How?

All allowances created under a multi-sector cap and trade system would represent the right to emit an equivalent quantity of greenhouse gas emissions. For this reason, electricity sector allowances under a first seller approach would be completely fungible with allowances for other sectors.

H. Relationship to a Multi-State System Such as the Western Regional Climate Action Initiative

36. Compare and contrast the ability of a deliverer/first-seller and a load-based approach to avoid double counting of emissions between states.

As noted above, neither a first-seller nor the CPUC's proposed load-based approach can reasonably be expected to have an impact on out-of-state emissions, absent

GHG programs in those states. If other states within the WECC adopt GHG regulations, it would be necessary to exempt generators that are subject to GHG caps in other states from the requirement to surrender emission allowances for power imported into California. Information on the source area as identified on NERC e-tags would enable the identification of affected imports.

37. How should exports from California be handled under a deliverer/first-seller approach? Would the proper treatment of exports depend on whether the receiving state has a cap-and-trade system? If so, how?

The treatment of exports under a first-seller approach is not dependent on whether a receiving state has a cap and trade system, but rather on the design of the cap and trade system. If the receiving state has a source-based system, then there is no reason for that state to be concerned with power imported from California, as there is no possibility for double regulation of the emissions associated with that power. However, if the receiving state implements a first-seller approach, or a load-based approach, then it will be important for that state to exempt power imported from California from its GHG cap. It is essential, therefore, that California coordinate its GHG regulations with other states in the region.

WPTF/AReM also notes that emissions associated with exports would not be captured under a load-based approach; another mechanism would be needed to address these emissions.

38. If some states in the region adopt a source-based system (or a load-based system which also regulates exports), how would the State of California verify the true source of imports in order to avoid double-regulation of power imported from other capped states?

NERC e-tags could be used to identify the source area of the imported power. While a patchwork of state trading systems might encourage the wheeling of power through regulated states to avoid GHG compliance costs, WPTF/AReM does not believe this practice could be completely prevented in the absence of a WECC-wide system.

39. How would a deliverer/first-seller approach function relative to an Oregon load-based system (as currently proposed by Oregon)?

If California adopts a first-seller approach, then Oregon should treat power sourced from California as zero-emission, because the carbon cost of emissions from this power have already been captured in California.

I. Interaction with Potential Federal Regulation

40. How easily could a deliverer/first-seller approach scale or link to multi-state, national, or international programs?

Assuming that other multi-state or international programs adopt an approach that regulates actual GHG emissions (as opposed to emissions per unit of output), then the allowances created under a California approach would be completely fungible with these systems. In the event that a federal source-based system is adopted, it will be necessary to eliminate the requirement for surrender of allowances for imported power. The first-seller approach would then be reduced to a standard source-based system for in-state generators. WPTF/AReM believes that a first seller approach will be easier to transition to the federal system, than a load-based approach.

41. Would one approach (deliverer/first-seller or load-based) be easier to transition into a potential federal GHG regulatory system? If one would be superior in this respect, explain why and what assumptions you are making about the likely federal framework.

Of the eleven GHG trading bills that have been introduced into the current (110^{th}) Congress, all propose a source-based GHG emissions trading program. Further all existing emission trading systems (the Kyoto Protocol, the European Emission Trading System and the Regional Greenhouse Gas Initiative) are source-based systems. To date, only Oregon and California are actively considering load-based system. For this reason, WPTF/AReM considers it highly probable that any future federal regulation will be source-based.

As discussed in the responses to questions 26-39, a first-seller approach is easier to integrate with a source-based system because it would be simple to simply remove the requirements on imported power.

42. What are the merits of the deliverer/first-seller proposal as a model for other governments' efforts, particularly at the national level?

WPTF/AReM reserves the right to address this question through reply comments.

J. Questions for Legal Briefing

WPTF/AReM has no response on the legal briefing questions.

Conclusion

WPTF/AReM appreciates this opportunity to comment and the Commission's consideration of the comments listed herein.

Respectfully submitted,

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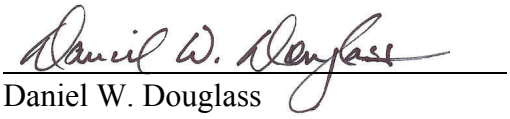

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August 6, 2007

CERTIFICATE OF SERVICE

I hereby certify that I have this day served a copy of the foregoing document on all parties of record in the above captioned proceedings by serving an electronic copy on their email addresses of record and, for those parties without an email address of record, by mailing a properly addressed copy by first-class mail with postage prepaid to each party on the Commission's official service list for this proceeding.

This Certificate of Service is executed on August 6, 2007, at Woodland Hills, California.

Michelle Dangott

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